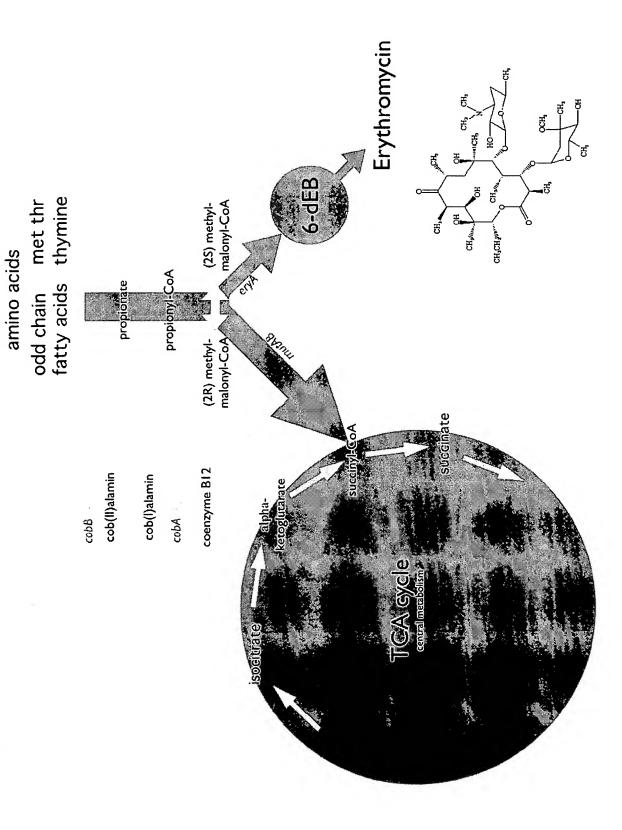
branched chain



REPLACEMENT SHEET 1/6

FIG. 2 (SEQ ID NO:1)

gcggtcgacg	gcgccgagcc	gtgggacgcc	cccgagggca	tcgcggtcaa	gaacctctac	60
accgccgacg	acctcgccga	cgtcgacgcg	ctcgacacct	acccgggcct	cgcgccgttc	120
ctgcgcggtc	cctacccggc	catgtacacg	acccagccgt	ggacgatccg	ccagtacgcc	180
gggttctcga	ccgccgagga	gtcgaacgcg	ttctaccgcc	gcaacctcgc	cgccggccaa	240
aagggcctct	cggtcgcctt	cgacctcgcg	acgcaccgcg	gctacgactc	cgaccacccg	300
cgcgtgaagg	gcgacgtcgg	catggccggc	gtcgcgatcg	actcgatcta	cgacgcccgc	360
cagctcttcg	acggcatccc	gctcgacgag	atgagcgtct	cgatgaccat	gaacggcgcg	420
gtgctcccgg	tgctcgcgct	ctacatcgtg	gcggccgagg	agcagggggt	gacgccggag	480
cagetetegg	ggaccatcca	gaacgacatc	ctcaaggagt	tcatggtccg	caacacctac	540
atctacccgc	cggcgccgtc	gatgcggatc	atctccgaca	tcttcgcgta	cacggcggcg	600
aagatgccgc	ggttcaactc	catctccatc	tccgggtacc	acatccaaga	ggccggggcg	660
acgaacgacc	tcgagctcgc	ctacacgctc	gccgacggtg	tggagtacat	ccgcgccggg	720
ctcgacgtcg	gcctcgacat	cgacgcgttc	gcgccgcggc	tcagcttctt	ctgggccatc	780
ggcatgaact	tctacatgga	gatcgcgaag	atgcgcgccg	cccgtgccct	gwgggcccgg	840
ctcgtgcgcg	acttcgaccc	gaagaacccc	aagagcc TC a	gcctgcgcac	gcacagccag	900
acatcgggct	ggagcctcac	cgcgcaggac	gtgttcaaca	acgtccagcg	cacctgcatc	960
gaggcgatgg	ccgccacgca	gggccacacc	cagagcctgc	acacgaacgc	gctcgacgag	1020
gcgatcgcgc	tgccgacgga	cttcagcgcg	cggatcgccc	gcaacacgca	gctgctgctg	1080
cagcaggagt	cgggcaccac	cggcgtcatc	gacccgtggg	gcggctccta	ctacgtcgag	1140
aagctgacgc	acgacctcgc	gaaccgcgcc	tgggcgcaca	tccaggaggt	cgagaaggcc	1200
ggcggcatgg	ccaaggccat	cgaggcgggc	atccccaaga	tgcgcgtcga	ggaggcggcc	1260
gcccgcacgc	aggcacgcat	cgactccggc	cagcaggccg	tcatcggcgt	caacacctac	1320
cgcctcgccg	acgaggaccc	gctcgacgtg	ctcaaggtcg	acaacgcgtc	ggtctacgcc	1380
cagcaggtgg	cgaagctcga	gcgactgcgc	gccgagcgcg	acccgcagga	ggtcgagcgc	1440
gcgctcgacg	ccctgacggc	cagcgccgag	cgtggcgcca	gccgcgacgg	ctcgctcgac	1500
ggcaacctgc	tcgccctggc	cgtcgacgcg	gcccgcgcga	aggcgacggt	cggcgagatc	1560
tcctacgcgc	tcgagaaggt	ctacgggcgc	caccaggccg	tcatccgtac	gatctccggt	1620

REPLACEMENT SHEET 2/6

FIG. 2 cont'd

gtgtaccgga	ccgaggcggg	ccagggcggc	aacgtccaga	aggtcatcga	cgccaccgag	1680
gcgttcgaga	aggccgaggg	tcgacgcccg	cgcatcctcg	tggccaagat	gggccaggac	1740
ggccacgacc	gcggccagaa	ggtcatcgtc	acggcgttcg	ccgacatggg	cttcgacgtc	1800
gacgtcggac	cgctgttctc	cacgcccgag	gaggtcgcgc	agcaggccgt	ggacgccgac	1860
gtgcacatcg	tcggcgtctc	gagcctcgcg	gcgggccacc	tgacgctcct	gccggagctg	1920
aagaaggcgt	tggccgagct	cggcggcgag	gacgtcatgg	tcgtcatggg	tggcgtcatc	1980
ccgcccgacg	acgtgccgac	gctgaaggag	atgggcgctg	ccgaggtgtt	cctgcccggc	2040
acggtcatcg	ccgactccgc	gctcagcctg	ctcgagcggt	ccgcgcgagc	ctgcagcact	2100
agatggtcgg	ttcgtccgag	gtaa				2124

REPLACEMENT SHEET 3/6

FIG. 3 (SEQ ID NO:2)

ctgtctctta	tacacatctc	aaccatcatc	gatgaattcc	accctgtgaa	tgcgcaaacc	60
aacccttggc	agaacatatc	catcgcgtcc	gccatctcca	gcagccgcac	gcggcgcatc	120
tcgggcagcg	ttgggtcctg	gccacgggtg	cgcatgatcg	tgctcctgtc	gttgaggacc	180
cggctaggct	ggcggggttg	ccttactggt	tagcagaatg	aatcaccgat	acgcgagcga	240
acgtgaagcg	actgctgctg	caaaacgtct	gcgacctgag	caacaacatg	aatggtcttc	300
ggtttccgtg	tttcgtaaag	tctggaaacg	cggaagtcag	cgccctgcac	cattatgttc	360
cggatctatg	tcgggtgcgg	agaaagaggt	aatgaaatgg	cagatccctg	gcttgttgtc	420
cacaaccgtt	aaaccttaaa	agctttaaaa	gccttatata	ttctttttt	tcttataaaa	480
cttaaaacct	tagaggctat	ttaagttgct	gatttatatt	aattttattg	ttcaaacatg	540
agagcttagt	acgtgaaaca	tgagagctta	gtacgttagc	catgagagct	tagtacgtta	600
gccatgaggg	tttagttcgt	taaacatgag	agcttagtac	gttaaacatg	agagcttagt	660
acgtgaaaca	tgagagctta	gtacgtacta	tcaacaggtt	gaactgctga	tcttcggatc	720
tatgtcgggt	gcggagaaag	aggtaatgaa	atggcatccg	gatctgcatc	gcaggatgct	780
gctggctacc	ctgtggaaca	cctacatctg	tattaacgaa	gcaattcgaa	ttcacagagg	840
cgcttatcgg	ttggccgcga	gattcctgtc	gatcctctcg	tgcagcgcga	ttccgaggga	900
aacggaaacg	ttgagagact	cggtctggct	catcatgggg	atggaaaccg	aggcggaaga	960
cgcctcctcg	aacaggtcgg	aaggcccacc	cttttcgctg	ccgaacagca	aggccagccg	1020
atccggattg	tccccgagtt	ccttcacgga	aatgtcgcca	tccgccttga	gcgtcatcag	1080
ctgcataccg	ctgtcccgaa	tgaaggcgat	ggcctcctcg	cgaccggaga	gaacgacggg	1140
aagggagaag	acgtaacctc	ggctggccct	ttggagacgc	cggtccgcga	tgctggtgat	1200
gtcactgtcg	accaggatga	tccccgacgc	tccgagcgcg	agcgacgtgc	gtactatcgc	1260
gccgatgttc	ccgacgatct	tcaccccgtc	gagaacgacg	acgtccccac	gccggctcgc	1320
gatatcgccg	aacctggccg	ggcgagggac	gcgggcgatg	ccgaatgtct	tggccttccg	1380
ctcccccttg	aacaactggt	tgacgatcga	ggagtcgatg	aggcggaccg	gtatgttctg	1440
ccgcccgcac	agatccagca	actcagatgg	aaaaggactg	ctgtcgctgc	cgtagacctc	1500
gatgaactcc	accccggccg	cgatgctgtg	catgaggggc	tcgacgtcct	cgatcaacgt	1560
tgtctttatg	ttggatcgcg	acggcttggt	gacatcgatg	atccgctgca	ccgcgggatc	1620

REPLACEMENT SHEET 4/6

FIG. 3 cont'd

ggacggattt	gcgatggtgt	ccaactcagt	catggtcgtc	ctaccggctg	ctgtgttcag	1680
tgacgcgatt	cctggggtgt	gacaccctac	gcgacgatgg	cggatggctg	ccctgaccgg	1740
caatcaccaa	cgcaagggga	agtcgtcgct	ctctggcaaa	gctccccgct	cttccccgtc	1800
cgggacccgc	gcggtcgatc	cccgcatatg	aagtattcgc	cttgatcaga	tcaggtaccc	1860
ggggatcatc	ttattaatca	gataaaatat	ttctagattt	cagtgcaatt	tatctcttca	1920
aatgtagcac	ctgaagtcag	ccccatacga	tataagttgt	aattctcatg	tttgacagct	1980
tatcatcgat	aagctttaat	gcggtagttt	atcacagtta	aattgctaac	gcagtcaggc	2040
accgtgtatg	aaatctaaca	atgcgctcat	cgtcatcctc	ggcaccgtca	ccctggatgc	2100
tgtaggcata	ggcttggtta	tgccggtact	gccgggcctc	ttgcgggata	tcgtccattc	2160
cgacagcatc	gccagtcact	atggcgtgct	gctagcgcta	tatgcgttga	tgcaatttct	2220
atgcgcaccc	gttctcggag	cactgtccga	ccgctttggc	cgccgcccag	tcctgctcgc	2280
ttcgctactt	ggagccacta	tcgactacgc	gatcatggcg	accacacccg	tcctgtggat	2340
cctctacgcc	ggacgcatcg	tggccggcat	caccggcgcc	acaggtgcgg	ttgctggcgc	2400
ctatatcgcc	gacatcaccg	atggggaaga	tegggetege	cacttcgggc	tcatgagcgc	2460
ttgtttcggc	gtgggtatgg	tggcaggccc	cgtggccggg	ggactgttgg	gcgccatctc	2520
cttgcatgca	ccattccttg	cggcggcggt	gctcaacggc	ctcaacctac	tactgggctg	2580
cttcctaatg	caggagtcgc	ataagggaga	gcgtcgaccg	atgcccttga	gagccttcaa	2640
cccagtcagc	tccttccggt	gggcgcgggg	catgactatc	gtcgccgcac	ttatgactgt	2700
cttctttatc	atgcaactcg	taggacaggt	gccggcagcg	ctctgggtca	ttttcggcga	2760
ggaccgcttt	cgctggagcg	cgacgatgat	cggcctgtcg	cttgcggtat	tcggaatctt	2820
gcacgccctc	gctcaagcct	tcgtcactgg	tcccgccacc	aaacgtttcg	gcgagaagca	2880
ggccattatc	gccggcatgg	cggccgacgc	gctgggctac	gtcttgctgg	cgttcgcgac	2940
gcgaggctgg	atggccttcc	ccattatgat	tcttctcgct	tccggcggca	tcgggatgcc	3000
cgcgttgcag	gccatgctgt	ccaggcaggt	agatgacgac	catcagggac	agcttcaagg	3060
atcgctcgcg	gctcttacca	gcctaacttc	gatcattgga	ccgctgatcg	tcacggcgat	3120
ttatgccgcc	tcggcgagca	catggaacgg	gttggcatgg	attgtaggcg	ccgccctata	3180
ccttgtctgc	ctccccgcgt	tgcgtcgcgg	tgcatggagc	cgggccacct	cgacctgaat	3240

REPLACEMENT SHEET 5/6

ggaagccggc	ggcacctcgc	taacggattc	accactccaa	gaattggagc	caatcaattc	3300
ttgcggagaa	ctgtgaatgc	gcaaaccaac	ccttggcaga	acatatccat	cgcgtccgcc	3360
atctccagca	gcgcacgcgg	cgcatctcgg	gcacgttggg	tcctggaatt	cgagctcggt	3420
accagcccga	cccgagcacg	cgccggcacg	cctggtagat	gtcggaccgg	agttcgaggt	3480
acgcggcttg	caggtccagg	aaggggacgt	ccatgcgagt	gtccgttcga	gtggcggctt	3540
gcgcccgatg	ctagtcgccg	ttgatcggcg	atcgcaggtg	cacgcggtcg	atcttgacgg	3600
ctggcgagag	gtgcgggagg	atctgaccga	cccggtccac	acgtggcacc	gcgatgctgt	3660
tgtgggctgg	acaatcgtgc	cggttggtag	gatcctctag	agtcgacgca	tgcaagcttc	3720
tgcaggcatg	caagcttcag	ggttgagatg	tgtataagag	acag		3764

REPLACEMENT SHEET 6/6

FIG. 4 (SEQ ID NO:3)

atgccccagg	gccagccgct	ggtcgtcccc	gacgacggcc	tcaccacccg	ccagcgtcgc	60
aaccgtccgc	tcgtcatggt	ccacaccggg	cccggcaagg	ggaagtcgac	cgccgcgttc	120
ggcctcgcca	tgcgcgcctg	gaaccagggc	tggaaggtcg	gcgtgttcca	gttcgtgaag	180
tccgccaagt	ggcgcgtcgg	cgagcagagc	gtgctcgagc	acctgggccg	cctgcac GA g	240
accgagggcc	tcggcgggcc	cgtcgagtgg	cacaagatgg	gctcgggctg	gtcgtggtcg	300
cgcaagtcgg	gcaccgacga	cgaccacgcc	gtcgccgccg	ccgagggctg	ggccgagatc	360
aagcgtcgcc	tcgccaccga	gacgcacgac	ctctacgtgc	tcgacgagtt	cacctacccg	420
atgaagtggg	gctgggtcga	cgtcgacgac	gtcgccgaca	cgctcgcgtc	gcgccccggc	480
cgccagcacg	tggtgatcac	cggccgcgac	gccgccccc	ggctcctgga	ggtcgccgac	540
ctcgtcaccg	agatgacgaa	ggtcaagcac	cccatggacg	tcggccagaa	gggtcagcga	600
ggcatcgagt	ggtga					615